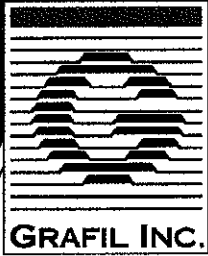


ATTACHMENT C

Applications for Title V Permit Modification



JAN 16 2008

January 15, 2008

Mr. Jorge DeGuzman
Permitting Program Supervisor
Sacramento Metropolitan Air Quality Management District
777 12th Street, 3rd Floor
Sacramento, CA 95814-1908

Re: Application to Modify the Title V Permit for Grafil, Inc.


Dear Mr. DeGuzman:

Grafil, Inc. is pleased to submit to the Sacramento Metropolitan Air Quality Management District (District) the enclosed application for a minor modification to the Title V Permit for its facility in Sacramento, California. This application is being submitted in response to two Authorities to Construct (ATCs) that the District recently issued to Grafil for fugitive exhaust running conditions associated with Process Lines 31 and 32 (ATCs #20519 and #20520).

We have not enclosed a check for the Title V permit modification application filing fees because, pursuant to Section 313 of Rule 301 (Permit Fees – Stationary Source), the District will assess fees based upon the actual hours spent by District staff in processing the application.

If you have any questions regarding this Title V application, please do not hesitate to call Reneé Kunz of my staff at 379-2157, or Jeff Adkins of Sierra Research, 444-6666.

Sincerely,


Tsutomu Darguaji
Vice President, Operations

Attachment

cc: Jeff Adkins, Sierra Research

5900 88th Street
Sacramento, CA
95828, USA
Tel: 916.386.1733
Fax: 916.383.7668
Web: www.grafil.com



ISO 9001:2000
FM 56416

APPLICATION TO MODIFY TITLE V PERMIT

I. FACILITY IDENTIFICATION

1. Facility Name: Grafil, Inc.
2. Parent Company: _____
(if different from Facility name)
3. Mailing Address: 5900 88th Street
Sacramento, CA 95828
4. Facility Location: _____
5. Type of Organization:
☒ Corporation ☐ Sole Ownership ☐ Government ☐ Partnership ☐ Utility Company
6. Responsible Official: Tsutomu Daiguji Phone No.: (916) 386-1733
Title: Vice President
7. Plant Site Contact: Renee Kunz Phone No.: (916) 379-2157
Title: Manufacturing Technology Manager

II. TYPE OF PERMIT ACTION

	Current Permit Number	Permit Expiration Date
<input type="checkbox"/> Significant Permit Modification		
<input checked="" type="checkbox"/> Minor Permit Modification	TV2006-01-01	October 22, 2012
<input type="checkbox"/> Administrative Amendment		

APPLICATION TO MODIFY TITLE V PERMIT

III. DESCRIPTION OF PERMIT ACTION

1. Does the permit action involve?: ☐ Temporary Source ☐ Voluntary Emissions Caps
☐ Acid Rain Source ☐ Alternative Operating Scenarios
☐ MACT Requirements

2. Provide a general description of the proposed permit modification. Reference any Authority to Construct that is requested to be incorporated. Attach any additional information that is relevant to the request.
Minor modification to the fugitive emission conditions for Lines 31 and 32. Associated A/C's are

A/C 20519 and A/C 20520 Grafite Fiber manufacturing Process Line 31 and Line 32.

The duckwork was previously modified under A/C's ^q15554 & ^q15555 but the condition to vent through
the outside oxidizers (OTO's) was not physically feasible or cost effective. Grafil proposed to route the
fugitive exhaust through the OTO's only during process up-set events, including start-ups, when HCN
concentrations may occur in the fugitive exhaust. This flexible operation of the fugitive exhaust will still
meet Grafil's primary goal – minimizing HCN emissions during a process up-set – while also minimizing
oxidizer combustion emissions and energy consumption.

Under penalty of perjury, I certify that based on information and belief formed after reasonable inquiry, the answers, statements and information contained in this application (and supplemental attachments thereto) are true, accurate and complete. This application consists of the application forms provided by the SMAQMD, information required pursuant to the List and Criteria and any supplemental information and/or attachments submitted with the application. I also certify that I am the responsible official as defined in SMAQMD Rule 207.

T. Daiguji
Signature of Responsible Official

January 15, 2008

Date

Tsutomu Daiguji
Print Name of Responsible Official

Background

Grafil operates a carbon fiber manufacturing facility in Sacramento, California. The manufacturing process consists of two separate production lines (Line 31 and Line 32). In September 2006, Grafil filed with the District an A/C application to modify the fugitive exhaust ductwork on Lines 31 and 32. The District issued A/Cs #19554 and #19555 for this modification on October 20, 2006. Grafil commenced construction in October 2005 and completed construction in March 2007. Conditions #14 and #15 of Permits to Operate (PTOs) #15554 and #15555 specify that Grafil shall not process carbon fiber unless the fugitive exhaust is vented to the outdoor thermal oxidizers. However, continuously venting the fugitive exhaust to the outdoor thermal oxidizer is not physically feasible or cost effective. Consequently, Grafil is submitting this ATC application to modify the permit conditions pertaining to the fugitive exhaust from Lines 31 and 32.

Equipment Description

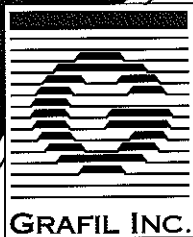
Each carbon fiber production line consists of the following processes, as shown in Figure 1:

- Surface oxidation in six electrically heated oxidation ovens;
- Thermal oxidization of reactive organic compounds (ROC) and air toxics released from the oxidation ovens in a 9.18 MMBtu/hr natural gas-fired outdoor thermal oxidizer;
- Tar removal in an electrically heated low-temperature furnace;
- Carbonization in an electrically heated high-temperature furnace;
- Surface treatment with a solution that promotes good adhesion;
- Thermal oxidization of ROC and air toxics released from the furnaces in a 2.4 MMBtu/hr natural gas-fired indoor thermal oxidizer; and
- Baghouse filtration of PM₁₀ released from the furnaces and thermal oxidizer.

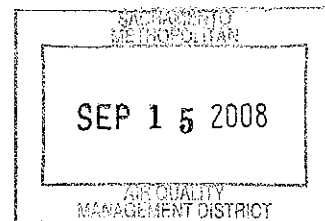
Emissions from the two production lines are combined into a single exhaust stack. Emissions from the oxidation ovens and their associated outdoor thermal oxidizers are discharged directly to the stack. Emissions from the furnaces and their associated indoor thermal oxidizers are filtered through a baghouse and then discharged to the stack.

Fume hoods located at the oven and furnace outlets collect fugitive hydrogen cyanide (HCN) emissions, preventing the release of toxic gases into the plant work area. Typically, the fugitive exhaust contains negligible HCN concentrations during normal plant operation but may contain higher HCN concentrations during an upset in the carbon fiber manufacturing process, including startup events. Originally, the fugitive exhaust from each process line was routed directly to the main stack, bypassing the thermal oxidizers. The recent modification to the fugitive exhaust added additional ductwork, providing Grafil with the ability to route the fugitive exhaust directly to the main stack or to the outdoor thermal oxidizer. As mentioned previously, Grafil's PTO prohibits carbon fiber manufacturing unless the fugitive exhaust is vented to the outdoor thermal oxidizers.

Subsequent operation of the carbon manufacturing process revealed that continuously routing the fugitive exhaust through the outdoor thermal oxidizer put too great a load on the fugitive exhaust fans and also dramatically increased the natural gas consumption in the outdoor thermal oxidizer. Routing the fugitive exhaust through the outdoor thermal oxidizer during routine operation provides negligible HCN emission reductions while increasing oxidizer combustion emissions and energy costs. Therefore, Grafil is proposing to route the fugitive exhaust through the outdoor thermal oxidizer only during process upset events, including startups, when higher HCN concentrations may occur in the fugitive exhaust. This flexible operation of the fugitive exhaust will still meet Grafil's primary goal for this fugitive exhaust modification—minimizing HCN emissions during a process upset—while also minimizing oxidizer combustion emissions and energy consumption associated with this risk reduction measure.



September 9, 2008



Mr. Jorge DeGuzman
Permitting Program Supervisor
Sacramento Metropolitan Air Quality Management District
777 12th Street, 3rd Floor
Sacramento, CA 95814-1908

Re: Four Applications to Modify the Title V Permit for Grafil, Inc.

Dear Mr. DeGuzman:

Grafil, Inc. is pleased to submit to the Sacramento Metropolitan Air Quality Management District (District) the four enclosed applications for minor modifications to the Title V Permit for its facility in Sacramento, California. These applications are being submitted in response to five Authority to Construct (A/C) permits that the District issued to Grafil:

- A/C #20835 to install a new natural gas-fired boiler (Boiler #4) at the facility;
- A/C #21244 to install a new Diesel fire pump at the facility ; 02-20-2009 REPLACED BY A/C21750 BN
- A/C #21252 and #21253 to limit CO emissions from manufacturing Lines 31 and 32; and
- A/C #21254 to remove the facility-wide CO emissions limit – and associated CO emissions monitoring requirements – from Boiler #3;

We have not enclosed a check for the Title V modification application filing fees because, pursuant to Section 313 of Rule 301 (Permit Fees – Stationary Source), the District will assess fees based upon the actual hours spent by District staff in processing the application. If you have any questions regarding this Title V application, please do not hesitate to call Dan Welch of Sierra Research at (916) 444-6666. Sierra Research is serving as our consultant on this project.

Sincerely,

Eric Argent
Manager, Quality and Technical Services

Encl.

cc: Dan Welch, Sierra Research

5900 88th Street
Sacramento, CA
95828, USA
Tel: 916.386.1733
Fax: 916.383.7668
Web: www.grafil.com



APPLICATION TO MODIFY TITLE V PERMIT

I. FACILITY IDENTIFICATION

1. Facility Name: Grafil, Inc.
2. Parent Company: _____
(if different from Facility name)
3. Mailing Address: 5900 88th Street
Sacramento, CA 95828
4. Facility Location: _____
5. Type of Organization:
☒ Corporation ☐ Sole Ownership ☐ Government ☐ Partnership ☐ Utility Company
6. Responsible Official: Tsutomu Daiguji Phone No.: (916) 379-2152
Title: Vice President, Operations
7. Plant Site Contact: Eric Argent Phone No.: (916) 379-2111
Title: Manager, Quality & Technical Services

II. TYPE OF PERMIT ACTION

	Current Permit Number	Permit Expiration Date
<input type="checkbox"/> Significant Permit Modification		
<input checked="" type="checkbox"/> Minor Permit Modification	TV2006-01-01	10/22/2012
<input type="checkbox"/> Administrative Amendment		

APPLICATION TO MODIFY TITLE V PERMIT

III. DESCRIPTION OF PERMIT ACTION

1. Does the permit action involve?: ☐ Temporary Source ☒ Voluntary Emissions Caps
☐ Acid Rain Source ☐ Alternative Operating Scenarios
☐ MACT Requirements
2. Provide a general description of the proposed permit modification. Reference any Authority to Construct that is requested to be incorporated. Attach any additional information that is relevant to the request.
- Grafil had a facility-wide CO emission limit. Attachment A of the Title V permit contains monitoring requirements governing the compliance demonstration for this facility-wide limit. Grafil submitted a permit application to lower the CO emissions limits on Lines 31 and 32. This modification lowered the maximum facility CO emissions below the facility-wide CO limit, thus eliminating the need for the facility-wide CO emissions limit and associated CO emissions monitoring pursuant to Attachment A. The District issued A/C #21254 to remove the facility-wide CO emission limit and the associated CO emissions monitoring requirements from Boiler #3. This Title V modification implements A/C #21254.
-
-

Under penalty of perjury, I certify that based on information and belief formed after reasonable inquiry, the answers, statements and information contained in this application (and supplemental attachments thereto) are true, accurate and complete. This application consists of the application forms provided by the SMAQMD, information required pursuant to the List and Criteria and any supplemental information and/or attachments submitted with the application. I also certify that I am the responsible official as defined in SMAQMD Rule 207.

T. Daigui
Signature of Responsible Official

September 9, 2008

Date

Tsutomu Daigui
Print Name of Responsible Official

APPLICATION TO MODIFY TITLE V PERMIT

I. FACILITY IDENTIFICATION

1. Facility Name: Grafil, Inc.
2. Parent Company: _____
(If different from Facility name)
3. Mailing Address: 5900 88th Street
Sacramento, CA 95828
4. Facility Location: _____
5. Type of Organization:
☒ Corporation ☐ Sole Ownership ☐ Government ☐ Partnership ☐ Utility Company
6. Responsible Official: Tsutomu Daiguji Phone No.: (916) 379-2152
Title: Vice President, Operations
7. Plant Site Contact: Eric Argent Phone No.: (916) 379-2111
Title: Manager, Quality & Technical Services

II. TYPE OF PERMIT ACTION

	Current Permit Number	Permit Expiration Date
<input type="checkbox"/> Significant Permit Modification		
<input checked="" type="checkbox"/> Minor Permit Modification	TV2006-01-01	10/22/2012
<input type="checkbox"/> Administrative Amendment		

APPLICATION TO MODIFY TITLE V PERMIT

III. DESCRIPTION OF PERMIT ACTION

1. Does the permit action involve?: ☐ Temporary Source ☒ Voluntary Emissions Caps
☐ Acid Rain Source ☐ Alternative Operating Scenarios
☐ MACT Requirements

2. Provide a general description of the proposed permit modification. Reference any Authority to Construct that is requested to be incorporated. Attach any additional information that is relevant to the request.
- Grafil had a facility-wide CO emission limit. Attachment A of the Title V permit contains monitoring requirements governing the compliance demonstration for this facility-wide limit. Grafil submitted a permit application to lower the CO emission limits on Lines 31 and 32. This modification lowered the maximum facility CO emissions below the facility-wide CO limit, thus eliminating the need for the facility-wide CO emissions limit and the associated CO emissions monitoring pursuant to Attachment A. The District issued A/Cs #21252 and #21253 to lower the CO emission limits on Lines 31 and 32. This Title V modification implements A/Cs #21252 and #21253.
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-
-

Under penalty of perjury, I certify that based on information and belief formed after reasonable inquiry, the answers, statements and information contained in this application (and supplemental attachments thereto) are true, accurate and complete. This application consists of the application forms provided by the SMAQMD, information required pursuant to the List and Criteria and any supplemental information and/or attachments submitted with the application. I also certify that I am the responsible official as defined in SMAQMD Rule 207.

T. Daiguji
Signature of Responsible Official

September 9, 2008
Date

Tsutomu Daiguji
Print Name of Responsible Official

APPLICATION TO MODIFY TITLE V PERMIT

I. FACILITY IDENTIFICATION

1. Facility Name: Grafil, Inc.
2. Parent Company: _____
(if different from Facility name)
3. Mailing Address: 5900 88th Street
Sacramento, CA 95828
4. Facility Location: _____
5. Type of Organization:
☒ Corporation ☐ Sole Ownership ☐ Government ☐ Partnership ☐ Utility Company
6. Responsible Official: Tsutomu Daiguji Phone No.: (916) 379-2152
Title: Vice President, Operations
7. Plant Site Contact: Eric Argent Phone No.: (916) 379-2111
Title: Manager, Quality & Technical Services

II. TYPE OF PERMIT ACTION

	Current Permit Number	Permit Expiration Date
<input type="checkbox"/> Significant Permit Modification		
<input checked="" type="checkbox"/> Minor Permit Modification	TV2006-01-01	10/22/2012
<input type="checkbox"/> Administrative Amendment		

APPLICATION TO MODIFY TITLE V PERMIT

III. DESCRIPTION OF PERMIT ACTION

1. Does the permit action involve?: ☐ Temporary Source ☒ Voluntary Emissions Caps
☐ Acid Rain Source ☐ Alternative Operating Scenarios
☐ MACT Requirements

2. Provide a general description of the proposed permit modification. Reference any Authority to Construct that is requested to be incorporated. Attach any additional information that is relevant to the request.

Grafil submitted a permit application for a new Diesel fire pump rated at 140 bhp. The District issued

A/C #21244 to allow Grafil to install the fire pump. This Title V modification implements A/C #21244.

Under penalty of perjury, I certify that based on information and belief formed after reasonable inquiry, the answers, statements and information contained in this application (and supplemental attachments thereto) are true, accurate and complete. This application consists of the application forms provided by the SMAQMD, information required pursuant to the List and Criteria and any supplemental information and/or attachments submitted with the application. I also certify that I am the responsible official as defined in SMAQMD Rule 207.

T. Daiguji
Signature of Responsible Official

September 9, 2008

Date

Tsutomu Daiguji

Print Name of Responsible Official

APPLICATION TO MODIFY TITLE V PERMIT

I. FACILITY IDENTIFICATION

1. Facility Name: Grafil, Inc.
2. Parent Company: _____
(if different from Facility name)
3. Mailing Address: 5900 88th Street
Sacramento, CA 95828
4. Facility Location: _____
5. Type of Organization:
☒ Corporation ☐ Sole Ownership ☐ Government ☐ Partnership ☐ Utility Company
6. Responsible Official: Tsutomu Daiguji Phone No.: (916) 379-2152
Title: Vice President, Operations
7. Plant Site Contact: Eric Argent Phone No.: (916) 379-2111
Title: Manager, Quality & Technical Services

II. TYPE OF PERMIT ACTION

	Current Permit Number	Permit Expiration Date
<input type="checkbox"/> Significant Permit Modification		
<input checked="" type="checkbox"/> Minor Permit Modification	TV2006-01-01	10/22/2012
<input type="checkbox"/> Administrative Amendment		

APPLICATION TO MODIFY TITLE V PERMIT

III. DESCRIPTION OF PERMIT ACTION

1. Does the permit action involve?: ☐ Temporary Source ☒ Voluntary Emissions Caps
☐ Acid Rain Source ☐ Alternative Operating Scenarios
☐ MACT Requirements

2. Provide a general description of the proposed permit modification. Reference any Authority to Construct that is requested to be incorporated. Attach any additional information that is relevant to the request.
Grafil submitted a permit application for a new natural gas-fired boiler (Boiler #4) rated at 4.8 MMBtu/hr.

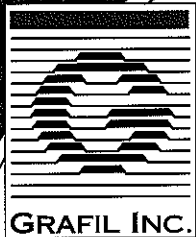
The District issued A/C #20835 to allow Grafil to install Boiler #4. This Title V modification implements A/C #20835.

Under penalty of perjury, I certify that based on information and belief formed after reasonable inquiry, the answers, statements and information contained in this application (and supplemental attachments thereto) are true, accurate and complete. This application consists of the application forms provided by the SMAQMD, information required pursuant to the List and Criteria and any supplemental information and/or attachments submitted with the application. I also certify that I am the responsible official as defined in SMAQMD Rule 207.

T. Daiguji
Signature of Responsible Official

September 9, 2008
Date

Tsutomu Daiguji
Print Name of Responsible Official



February 17, 2009

Mr. Jorge DeGuzman
Permitting Program Supervisor
Sacramento Metropolitan Air Quality Management District
777 12th Street, 3rd Floor
Sacramento, CA 95814-1908

Re: Two Applications to Modify the Title V Permit for Grafil, Inc.

Dear Mr. DeGuzman:

Grafil, Inc. is pleased to submit to the Sacramento Metropolitan Air Quality Management District (District) the two enclosed applications for minor modifications to the Title V Permit for its facility in Sacramento, California. These applications are being submitted in response to three Authority to Construct (A/C) permits that the District issued to Grafil:

- A/C #21750 to install a new Diesel fire pump at the facility ;
- A/C #21607 and #21608 to replace the HCN continuous emission monitoring system.

Please note that AC #21244 to install a new Diesel fire pump at the facility and the Title V application has been withdrawn and replaced with AC #21750.

We have not enclosed a check for the Title V modification application filing fees because, pursuant to Section 313 of Rule 301 (Permit Fees – Stationary Source), the District will assess fees based upon the actual hours spent by District staff in processing the application. If you have any questions regarding this Title V application, please do not hesitate to call myself at (916) 379 2111.

Sincerely,

Eric Argent
Manager, Quality and Technical Services

APPLICATION TO MODIFY TITLE V PERMIT

I. FACILITY IDENTIFICATION

1. Facility Name: Grafil, Inc.
2. Parent Company: _____
(if different from Facility name)
3. Mailing Address: 5900 88th Street
Sacramento, CA 95828
4. Facility Location: _____
5. Type of Organization:
☒ Corporation ☐ Sole Ownership ☐ Government ☐ Partnership ☐ Utility Company
6. Responsible Official: Tsutomu Daiguji Phone No.: (916) 379-2152

Title: Vice President, Operations
7. Plant Site Contact: Eric Argent Phone No.: (916) 379-2111

Title: Manager, Quality & Technical Services

II. TYPE OF PERMIT ACTION

	Current Permit Number	Permit Expiration Date
<input type="checkbox"/> Significant Permit Modification		
<input checked="" type="checkbox"/> Minor Permit Modification	TV2006-01-01	10/22/2012
<input type="checkbox"/> Administrative Amendment		

APPLICATION TO MODIFY TITLE V PERMIT

III. DESCRIPTION OF PERMIT ACTION

1. Does the permit action involve?: ☐ Temporary Source ☒ Voluntary Emissions Caps
☐ Acid Rain Source ☐ Alternative Operating Scenarios
☐ MACT Requirements

2. Provide a general description of the proposed permit modification. Reference any Authority to Construct that is requested to be incorporated. Attach any additional information that is relevant to the request.
Grafil submitted a permit application for a new Diesel fire pump rated at 197 bhp. The District issued

A/C #21750 to allow Grafil to install the fire pump. This Title V modification implements A/C #21750.

Under penalty of perjury, I certify that based on information and belief formed after reasonable inquiry, the answers, statements and information contained in this application (and supplemental attachments thereto) are true, accurate and complete. This application consists of the application forms provided by the SMAQMD, information required pursuant to the List and Criteria and any supplemental information and/or attachments submitted with the application. I also certify that I am the responsible official as defined in SMAQMD Rule 207.



Signature of Responsible Official

February 17, 2009

Date

Tsutomu Daiguji

Print Name of Responsible Official

APPLICATION TO MODIFY TITLE V PERMIT

I. FACILITY IDENTIFICATION

1. Facility Name: Grafil, Inc.
2. Parent Company: _____
(if different from Facility name)
3. Mailing Address: 5900 88th Street
Sacramento, CA 95828
4. Facility Location: _____
5. Type of Organization:
☒ Corporation ☐ Sole Ownership ☐ Government ☐ Partnership ☐ Utility Company
6. Responsible Official: Tsutomu Daiguji Phone No.: (916) 379-2152
Title: Vice President, Operations
7. Plant Site Contact: Eric Argent Phone No.: (916) 379-2111
Title: Manager, Quality & Technical Services

II. TYPE OF PERMIT ACTION

	Current Permit Number	Permit Expiration Date
<input type="checkbox"/> Significant Permit Modification		
<input checked="" type="checkbox"/> Minor Permit Modification	TV2006-01-01	10/22/2012
<input type="checkbox"/> Administrative Amendment		

APPLICATION TO MODIFY TITLE V PERMIT

III. DESCRIPTION OF PERMIT ACTION

1. Does the permit action involve?: ☐ Temporary Source ☒ Voluntary Emissions Caps
☐ Acid Rain Source ☐ Alternative Operating Scenarios
☐ MACT Requirements

2. Provide a general description of the proposed permit modification. Reference any Authority to Construct that is requested to be incorporated. Attach any additional information that is relevant to the request.

Grafil submitted a permit application for a replacement Hydrogen Cyanide continuous emission monitoring system. The new system is an open path laser detection system (IR Spectrometer). The permit limit for HCN is 95 ppm averaged over a one hour period

The District issued A/C's #21607 and 21608 to allow Grafil to install the HCN system.

This Title V modification implements A/C #21607 and 21608.

Under penalty of perjury, I certify that based on information and belief formed after reasonable inquiry, the answers, statements and information contained in this application (and supplemental attachments thereto) are true, accurate and complete. This application consists of the application forms provided by the SMAQMD, information required pursuant to the List and Criteria and any supplemental information and/or attachments submitted with the application. I also certify that I am the responsible official as defined in SMAQMD Rule 207.



Signature of Responsible Official

February 17, 2009

Date

Tsutomu Daiguji

Print Name of Responsible Official